TICKS AND MITES. NUMEROUS SPECIES OF ticks infest the livestock, including *Rhipicephalus sanguineus*, *Hyalomma dromedarii* and *Haemaphysalis cinnabarina punctata*. *Ornithodorus tholozani* occurs in many localities, and is the vector in sporadic cases of tick-borne relapsing fever. *O. savignyi* is present in the desert areas. The fowl or blue Persian tick, *Argas persicus*, and the castor bean tick, *Ixodes ricinus*, are widespread.

The itch mite, *Sarcoptes scabiei*, is prevalent, especially in the congested urban communities and rural villages. The grain itch mite, *Pediculoides ventricosus*, is a frequent pest in the grain-growing districts.

SCORPIONS AND SPIDERS. Scorpions are common, particularly in the northern provinces. The most dangerous species are *Buthus australis* and *B. crassicauda*. *B. europaeus* is also present. A few deaths from scorpion stings are reported each year, usually among young children or old people. *Scorpio maurus kruglovi* is sometimes encountered in the plains and *S. maurus townsendi* in the Persian Gulf region. The principal poisonous spider in Iraq is *Lycosa tarantula*.

OTHER ARTHROPODS. *Reduvius tabidus* and *R. annulipes* are found in many areas. The "date beetle," a large aquatic species of the family BELASTOMIDAE, is capable of causing serious bites.

Reptiles. Twenty-six species of snakes have been recorded from Iraq, but only 5 land varieties are venomous. Casualties from snake bites are reported occasionally. A large proportion of the fatalities is probably caused by the Levantine or blunt-nosed viper, *Vipera lebetina lebetina*, which inhabits the northeastern highlands from north of Baghdad to the Turkish and the Iranian frontiers. *V. lebetina euphratica* is also seen in some localities. The horned viper, *Aspis cerastes* (= *Cerastes cornutus*), is native to the alluvial plains, while the carpet viper, *Echis carinatus*, is found in limited areas in Diwaniya province. The hoodless cobra, *Naja morgani*, is widely distributed but apparently is rare. The poison-

IRAQ MM1

ous sea snake, *Enhydrina shistosa*, roams the Persian Gulf and the Shatt al Arab. Although it may be dangerous to fishermen, no fatalities are known to have occurred. 136 752 165

Rodents. *Rattus rattus frugivorus* is the rat most frequently encountered in Iraqi dwellings. *R. rattus alexandrinus* is also indigenous, while *R. norvegicus* is present in Basra, Baghdad and the river towns. *Nesokia buxtoni*, *Dipodillus dasyurus* and *Meriones charion* are reported from different localities. Rats are often captured in Baghdad and Basra and examined for evidences of plague, but otherwise little rodent control work is undertaken, except at the time of plague outbreaks. 136 164

Molluska.* *Bulinus truncatus* (— *B. contortus*), the intermediate snail host of *Schistosoma haematobium*, is found in numerous foci in central and southern Iraq, where pump or gravity flow irrigation is employed. It inhabits the many small and sluggish irrigation canals and the rice fields, borrow pits, marshes and other suitable collections of water, but is strictly seasonal in appearance, being abundant only in the summer and the fall months, from May or June to November. The snails are widespread in Basra, Muntafiq, Diwaniya and Amarah provinces in the south, but are absent from the Shatt al Arab region south of Basra, where breeding is restricted by the salinity of the water. They are more scattered in distribution in the central provinces and practically nonexistent in the north, aside from localized foci around the marshlands of the Mosul area. *Radix lagotis canaliculata*, a vector of *S. turkestanicum* which causes serious infections among the livestock, is found in the rice fields and the marshes of the southern delta. 136 232

The threat of the spread of *Bulinus truncatus*, and subsequently of schistosomiasis, with the expansion of irrigation creates a problem which is of major public health and economic importance to the country. Small-scale snail-control campaigns have been undertaken in the past in Baghdad, Basra and 136 164 744

* See footnote, page 10.

83:Simmons et al G-5 (1941-1951) 1954
M1 Middle East
IRAQ MH1

Diwaniya provinces. In 1949, a co-ordinated control program was introduced by the Iraqi government, and a Bilharzia Section was established within the national health organization. The section initiated a snail survey in the various endemic foci and research on the most effective methods of snail control. It carries on continuous snail destruction work through special units assigned to each of the infected provinces. 136 164 744

Plants. Little precise information is available regarding the prevalence of allergy-producing plants, but numerous weeds, grasses and trees, which have been incriminated in other countries, are present in districts with rainfall adequate to support such vegetation. 137 752

Occasional deaths, primarily among young children, have been traced to the consumption of the raw beans of *Vicia faba*, a prominent food crop throughout this region. The beans are toxic to susceptible individuals in the raw state. Plants of the *Senecio* group grow in sections of the northern highlands. The young green shoots are poisonous and sometimes cause fatalities among the livestock. 137 165 232

Food Sanitation

The government and municipal health authorities are responsible for the enforcement of regulations governing the sanitary quality of foods, meats and milk products, but the degree of enforcement varies in different localities. Health inspectors are charged with the supervision of establishments where foods are prepared or sold, such as foodshops, markets, restaurants and cafés, mineral-water bottling works and date-packing houses. Examinations for the presence of venereal diseases are theoretically required at regular intervals in the case of cooks and barbers, but no tests to detect other infections are carried out. 744

Meat animals are inspected before and after slaughter in the city abattoirs by officers of the government veterinary and health services. All carcasses offered for sale are supposed to bear an official stamp of

35₂ Hooper and Field S-5 (1934) 1937 MAI Iran MAI
Iraq MHI

I-I
824*
218*

water and alcohol, odorless but with a sweetish taste. It contains a
• [752] principle similar to glycyrrhizin. Sarcocolla[1] forms a plaster long
used by Parsi bone-setters, and is applied locally to the ears and
[302] face to allay neuralgic pains. Aitchison says the gum is used by ladies of the harem to improve their appearance and to give the skin a gloss (see "Sarcocolla" by D. Hooper, *Journ. As. Soc. Bengal*, Vol. 9, 1913, pp. 177–181).

Astragalus gummifer Labill. (Leguminosae)

کتیرا

Kathīrā (Teh.); Qatera, Katira gond (Hind.); gum Tragacanth. Field 128; W.H.M.M. 150861.

[314] The small, branching, thorny shrubs of *Astragalus* are especially to be found in Asiatic Turkey and Iran, where they form one of the most characteristic features of the vegetation. The above and other species yield, when incised, flat, ribbon-shaped pieces, or, when punctured, vermiform tears. The tragacanth gum from Tehran is in clean white ribbons, typical of the best commercial quality, largely used in medicine and confectionery.

Astragalus hamosus L. (Leguminosae)

اکلیل الملك

Iklīl (Teh.); Iklīl-ul-malik (Ar.); Adhafir-aj-jian, Adhafir-ash-shaitan (Iraq); Iklil-ul-mulk (Bom.); Aketi (Ham.); the curved pods. Field 145; W.H.M.M. 150889; K.B. 342.

The origin of this drug has been referred to various species of *Melilotus* and *Trigonella* which have curved pods. Those received from Tehran and Hamadan are horseshoe-shaped, 2.5 cm. in length, grayish brown, smooth, curved outward, grooved on both sides, and beaked; they are divided by a central partition and contain grayish yellow, rhomboidal seeds, notched at one end and with black spots. The pods are called in Iraq "Fairies' Nails" or "Devil's Claws," and are used for various disorders, but chiefly as a suppurative and astringent. Sometimes they are made into a plaster for reducing tumorous and painful swellings.—Mixed with *Viola* sp., they are taken before purgation (H.F.).

Bambusa arundinacea L. (Gramineae)

تبا شیر قلمی

Tabāshīr-i-qalamī (Teh.); Tabashira (Ar.); Bans lochan (Hind.); mineral concretion in stems of bamboo.

[1] [i.e., the gum of Astragalus fasciculaefolius, Kohl Farsi -- Analyst]